WHAT IS CLAIMED IS:

1.   An apparatus for monitoring a video signal,

comprising:

means for inputting a Y/color difference component

signal (Y, Pr, Pb);

means for setting upper limit values S and lower

limit values T corresponding to all components of an RGB

component signal (R, G, B);

means for determination as to the existence of a

gamut error, said determination means making determination

as to whether at least one of

a first condition $Y > S + \alpha \times Pb + \beta \times Pr$

(where each of α and β is a predetermined coefficient)

indicating that at least one of R, G and B components is

larger than the upper limit value S and

a second condition $Y < T + \gamma \times Pb + \delta \times Pr$

(where each of γ and δ is a predetermined coefficient)

indicating that at least one of the R, G and B components

is smaller than the lower limit value T

is satisfied; and

means for making a gamut error state visually

recognizable when the first condition or the second

condition is satisfied.

2.   An apparatus for monitoring a video signal,

comprising means for detecting a gamut error in an R

component, means for detecting a gamut error in a G

component, and means for detecting a gamut error in a B

component,

said means for detecting a gamut error in the R component including:

means for generating a first condition $Y > S - a \times Pr$ (where a is a predetermined coefficient) and a second condition $Y < T - a \times Pr$ from a Pr component (first color difference component) of a Y/color difference component signal and an upper limit value S and a lower limit value T of the RGB component signal; and

means for making a gamut error state visually recognizable with respect to the R component when the first condition or the second condition is satisfied,

said means for detecting a gamut error in the G component including:

means for generating a third condition $Y > S + b \times Pb + c \times Pr$ (where each of b and c is a predetermined coefficient) and a fourth condition $Y < T + b \times Pb + c \times Pr$ from the Pr component and a Pb component (second color difference component) of the Y/color difference component signal and the upper limit value S and the lower limit value T of the RGB component signal; and

means for making a gamut error state visually recognizable with respect to the G component when the third condition or the fourth condition is satisfied,

said means for detecting a gamut error in the B component including:

means for generating a fifth condition $Y > S - d \times Pr$ (where d is a predetermined coefficient) and a sixth condition $Y < T - d \times Pr$ from the Pb component of the

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Y/color difference component signal and the upper limit

value S and the lower limit value T of the RGB component

signal; and

means for making a gamut error state visually

recognizable with respect to the B component when the fifth

condition or the sixth condition is satisfied.